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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,286	08/22/2003	Carl V. Nelson	1861-SPL	9398
7590	06/15/2005		EXAMINER	
Office of Patent Counsel The Johns Hopkins University Applied Physics Laboratory 11100 Johns Hopkins Road Laurel, MD 20723-6099			STONE, JENNIFER A	
			ART UNIT	PAPER NUMBER
			2636	
			DATE MAILED: 06/15/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/646,286	NELSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jennifer A. Stone	2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>April 13, 2004</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show text labeling for Figure 1, items 101, 103, 105, 107, 109; Figure 2, items 105, 201, 203, 205, 109; Figure 5, items 101, 103, 501, 503, 201, 203, 205, 505, 507, 109, 105; Figure 6, items 600, 620, 101, 103, 105, 601, 109, 621, 623, 107 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Blunt (US 5,651,070).

For claim 1, Blunt discloses an audible alarm relay system comprising: a microphone for converting environmental sounds to electrical sound signals (col 2, Ins 58-61; Fig. 2, item 26); processing circuitry for receiving the electrical sound signals (col 3, Ins 4-8; Fig. 2, items 36, 38, 39), and analyzing the sound signals to determine if the sound signals contain a sound pattern that matches a stored sound pattern (col 4, Ins 37-44; Fig. 3, item 39); and an output device for notifying a user that the digital sound signal contains a sound pattern that matches a stored sound pattern (col 4, Ins 44-47; Fig. 3, item 110).

For claim 2, Blunt discloses the processing circuitry comprises: a processor for controlling the system (Fig. 2, item 36); a time sampler for sampling the sound signals [Fig. 2, items 26, 28, 30, and 32 are considered time sampling devices because they process analog signals (time-variant property)]; a memory for storing the stored sound patterns (Fig. 3, item 39 – MEM 1-4); a band pass filter for determining if the sampled sound signals contain at least one frequency that matches a stored frequency (col 2, Ins

59-64; Fig. 2, item 30; and a rate detector for determining if the sampled sound signals contain at least one rate that matches a stored rate (Fig. 2, item 40; Fig. 3, item 108; col 4, Ins 37-43 and Ins 52-56). The comparators are rate detectors because they detect and compare amplitude, and sound or rate of alternating waveform.

For claim 3, Blunt discloses an output device that notifies the user if the processing circuitry determines that the sampled sound signal contains both a frequency and a rate that matches a stored sound pattern (col 4, Ins 52-61; Fig. 5, items 44, 128, 130).

For claim 4, the output device is one of an audio, visual, and tactile device (col 4, Ins 56-61).

For claim 5, the audible alarm is any predetermined sound (Fig. 4; col 3, Ins 59-64).

For claim 6, Blunt discloses a noise cancellation means (Fig. 2, item 30) for monitoring the ambient noise and canceling the ambient noise from the environmental sounds (col 2, Ins 50-52 and 61-63).

For claim 11, Blunt discloses a transmitting unit, having the microphone and processing circuitry (Fig. 1, item 10, 24, 26), for transmitting a wireless alarm command signal if a matching sound pattern is found (Fig. 5, items 12, 16, 44; col 2, Ins 53-57); and a receiving unit having second processing circuitry and the output device for receiving the alarm command signal and notifying the user that the alarm command signal has been received (col 4, Ins 52-61).

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3. Claims 12-18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Blunt (US 5,651,070).

For claim 12, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 1 as stated above. In addition, Blunt discloses outputting a secondary alarm if it is determined that a matching sound pattern is stored in the memory (col 4, Ins 40-44, 47-52, and 56-61; Fig. 4, items 44, 50; Fig. 5, items 128, 124).

For claim 13, Blunt discloses the storing step to comprise of: inputting the sound pattern of the at least one audible alarm through the microphone; analyzing the input sound pattern; and storing the sound pattern in memory (col 3, Ins 4-8; Fig. 3, item 39 – MEM 1-4).

For claim 14, the analyzing step determines the frequency and rate of the sound pattern and stores the frequency and rate of the sound pattern in memory (Fig. 2, item 40; Fig. 3, item 108; col 4, Ins 37-43 and Ins 52-56).

For claim 15, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 16, the analyzing step comprises: time sampling the sound signals (see rejection of claim 2); correlating the sound signal with the stored sound pattern (col 1, Ins 59-67; col 2, Ins 1-9).

For claim 17, time sampling is performed in one of the analog domain and digital domain (col 2, Ins 58-66).

For claim 18, correlating is performed in one of the analog domain and digital domain (col 1, Ins 60-63).

For claim 20, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 11 as stated above.

4. Claims 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Blunt (US 5,651,070).

For claim 21, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 1-3 as stated above. In addition, Blunt discloses an analog to digital converter for converting the electrical sound signals to digital sound signals (Fig. 3, item 32; col 2, ln 63).

For claim 22, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 4 as stated above.

For claim 23, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 24, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

5. Claims 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Blunt (US 5,651,070).

For claim 25, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 1 and 12 as stated above.

For claim 26, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 14 as stated above.

For claim 27, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blunt, as applied to claim 1, and further in view of Nemirovski (US 2002/0143242).

For claim 7, Blunt discloses a processor for controlling the system; a time sampler for sampling the sound signals; a correlator or comparator for correlating the sound signal with the stored sound pattern (col 1, lns 61-63). The correlator is considered a comparator because a relationship of "1's" and "0's" (digital data) is compared between collected data and stored data. Furthermore, based on the relationship, an alarm signal may be sent to an individual. Additionally, Blunt discloses a digital memory for storing sound patterns (col 1, lns 59-61). However, Blunt does not disclose an analog memory. Nemirovski, on the other hand, does disclose an analog memory for storing sounds (parag 0056). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include an analog memory so that analog data is stored and retained for future use.

For claim 8, the time sampler performs the time sampling in one of the analog domain and digital domain (col 1, Ins 60-63).

For claim 9, the correlator performs the correlation in one of the analog domain and digital domain (col 1, Ins 60-63).

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blunt, as applied to claim 1, and further in view of Bar-Shalom et al. (US 6,535,131).

Blunt does not disclose the system as an after-market addition; however, Bar-Shalom discloses that a communication system is applied to an after-market add-on device (such as a printer or cell phone) for detecting pre-existing sound signals (col 3, Ins 58-64; col 6, Ins 45-55; Fig. 1, items 138, 140, 134). It would have been obvious to include apply the system interface as an after-market add on device so that various means of communicating an alarm are facilitated. In turn, a user is notified of an alarm condition in a reasonable amount of time.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blunt, as applied to claim 12, and further in view of Bar-Shalom et al. (US 6,535,131).

The claim is interpreted and rejected for the same reasons as stated in the rejection of claim 10 as stated above.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Parker (US 5,790,050) discloses an apparatus for a hearing-impaired individual for translating an audible signal into multiple, various notifying alerts.

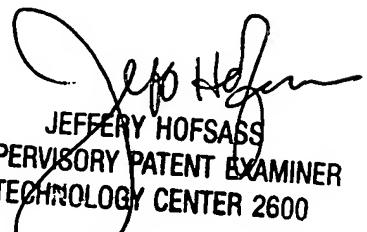
Clayton (US 4,777,474) discloses an alarm for the hearing-impaired that includes a hearing aid that distinguishes a variety of environmental tones and converts them into visual indicators.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Stone whose telephone number is (571) 272.2976. The examiner can normally be reached on M-F from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass, can be reached at (571) 272.2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Stone  
June 10, 2005

  
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